

US EPA ARCHIVE DOCUMENT



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State College, Pennsylvania 16801 USA  
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## **Report of Analysis**

### **Fluorochemical Characterization of Aqueous Samples**

**Project Name: P0005537**

**MPI Research Laboratory Report No. L0020423**

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#### ***Testing Laboratory***


MPI Research, Inc.  
3058 Research Drive  
State College, PA 16801

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#### ***Requester***

Tracey Hall  
AECOM Inc.  
1360 Peachtree St NE #500  
Atlanta, GA 30309  
Phone: 404-965-9695

**6 Signatures**

  
Robert Zhu, Manager, Analytical

4/6/10  
Date



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 12 - 022410

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
C8 Acid- Perfluorooctanoic Acid	0.0992 <sup>1,2</sup>	0.025	3/12/2010
PFOS- Perfluorooctanesulfonate	0.339	0.010	3/10/2010

<sup>1</sup> The lowest calibration standard (0.005 ng/mL) was excluded from the calculation of the calibration curve because the average peak area of the method blanks was greater than 50% of the standard's peak area, resulting in an increased LOQ.

<sup>2</sup> The relative percent difference (RPD) of the duplicate sample was greater than 20% and is therefore outside of the QC acceptance criteria.



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 12 - 022410 Duplicate

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
C8 Acid- Perfluorooctanoic Acid	0.122 <sup>1,2</sup>	0.025	3/12/2010
PFOS- Perfluorooctanesulfonate	0.364	0.010	3/10/2010

<sup>1</sup> The lowest calibration standard (0.005 ng/mL) was excluded from the calculation of the calibration curve because the average peak area of the method blanks was greater than 50% of the standard's peak area, resulting in an increased LOQ.

<sup>2</sup> The relative percent difference (RPD) of the duplicate sample was greater than 20% and is therefore outside of the QC acceptance criteria.



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 9 - 022410

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
PFOS- Perfluorooctanesulfonate	0.0381	0.010	3/10/2010



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 9 - 022410 Duplicate

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
PFOS- Perfluorooctanesulfonate	0.0426	0.010	3/10/2010



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 7 - 022410

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
C8 Acid- Perfluorooctanoic Acid	0.0457 <sup>1,2,3</sup>	0.025	3/12/2010
PFOS- Perfluorooctanesulfonate	0.0317	0.010	3/11/2010

<sup>1</sup> The lowest calibration standard (0.005 ng/mL) was excluded from the calculation of the calibration curve because the average peak area of the method blanks was greater than 50% of the standard's peak area, resulting in an increased LOQ.

<sup>2</sup> The relative percent difference (RPD) of the duplicate sample was greater than 20% and is therefore outside of the QC acceptance criteria.

<sup>3</sup> The low Field Matrix Spike recovery was outside the acceptance criteria of 70-130%.



**Summary of Fluorochemical Residues in Water Samples**Sample ID: Well 7 - 022410 Duplicate

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
C8 Acid- Perfluorooctanoic Acid	0.0285 <sup>1,2,3</sup>	0.025	3/12/2010
PFOS- Perfluorooctanesulfonate	0.0297	0.010	3/11/2010

<sup>1</sup> The lowest calibration standard (0.005 ng/mL) was excluded from the calculation of the calibration curve because the average peak area of the method blanks was greater than 50% of the standard's peak area, resulting in an increased LOQ.

<sup>2</sup> The relative percent difference (RPD) of the duplicate sample was greater than 20% and is therefore outside of the QC acceptance criteria.

<sup>3</sup> The low Field Matrix Spike recovery was outside the acceptance criteria of 70-130%.



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## Analytical Report

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### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 6 - 022410

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
PFOS- Perfluorooctanesulfonate	0.0599	0.010	3/11/2010



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 6 - 022410 Duplicate

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
PFOS- Perfluorooctanesulfonate	0.0547	0.010	3/11/2010

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 10 - 022410

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
PFOS- Perfluorooctanesulfonate	0.0485	0.010	3/11/2010



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## Analytical Report

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### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 10 - 022410 Duplicate

Analyte	Result (ng/mL)	LOQ (ng/mL)	Date Analyzed
PFOS- Perfluorooctanesulfonate	0.0434	0.010	3/11/2010



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## **Report of Analysis**

### **Fluorochemical Characterization of Aqueous Samples**

**Project Name: P0005537**

**MPI Research Laboratory Report No. L0020468**

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#### ***Requester***

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**6 Signatures**



Robert Zhu, Manager, Analytical

4/6/10

Date



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 5 - 030210

Date Analyzed: 03/15/10

Analyte	Result (ng/mL)	LOQ (ng/mL)
PFOS- Perfluorooctanesulfonate	< 0.010	0.010





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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 5 - 030210 Duplicate

Date Analyzed: 03/15/10

Analyte	Result (ng/mL)	LOQ (ng/mL)
PFOS- Perfluorooctanesulfonate	< 0.010	0.010



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## **Report of Analysis**

### **Fluorochemical Characterization of Aqueous Samples**

**Project Name: P0005537**

**MPI Research Laboratory Report No. L0020664**

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Gary Oden Jr., Research Chemist Associate II  
04/05/10  
Date

  
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Robert Zhu, Manager, Analytical  
4/6/10  
Date

Other Lab Members Contributing to Data:

Ellen Dashem.



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 13 - 031710

Date Analyzed: 04/02/10

Analyte	Result (ng/mL)	LOQ (ng/mL)
PFOS- Perfluorooctanesulfonate	0.0843	0.010



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## Analytical Report

### Summary of Fluorochemical Residues in Water Samples

Sample ID: Well 13 - 031710 Duplicate

Date Analyzed: 04/02/10

Analyte	Result (ng/mL)	LOQ (ng/mL)
PFOS- Perfluorooctanesulfonate	0.0743	0.010